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Bell Atlantic Network Services, Inc.
Two Bell Atlantic Plaza
1320 N. Court House Road
Eighth Floor
Arlington, VA 22201
703 974-3904
FAX 703 974-0665

Sylvia C. Williams
Executive Assistant



January 21, 1999

VIA FEDERAL EXPRESS

Mr. Scott Sawyer
New England Voice and Data, LLC
Executive Office Suites
3 Regency Plaza
Providence, RI 02903

***RE: Amendment to Interconnection Agreement between
Bell Atlantic and New England Voice and Data, LLC***

Dear Mr. Sawyer:

Enclosed for your records is an original executed First Amendment to the Interconnection Agreement made between Bell Atlantic - Massachusetts and New England Voice and Data, LLC and Bell Atlantic - New Hampshire and New England Voice and Data, LLC.

If you have any questions, please call Joe Greenwood at (617) 743-2395.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sylvia C. Williams".

Sylvia C. Williams

Enclosure

cc: Joe Greenwood

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**FIRST AMENDMENT
to
INTERCONNECTION AGREEMENT
between**

**NEW ENGLAND VOICE AND DATA
and
BELL ATLANTIC - MASSACHUSETTS**

This First Amendment is entered into this 4th day of January, 1999, by and between New England Voice and Data, LLC ("NEVD"), with offices at 3 Regency Plaza, Executive Office Suites, Providence, Rhode Island 02905, and New England Telephone and Telegraph Company, d/b/a Bell Atlantic-Massachusetts ("BA"), a New York corporation with offices at 185 Franklin Street, Boston, Massachusetts 02110.

WHEREAS NEVD and BA ("the Parties") entered into an Interconnection Agreement dated October 21, 1998 (the "Agreement"); and

WHEREAS the Parties now desire to amend the Agreement to set forth the rates, terms and conditions under which BA will provide Unbundled Dark Fiber to NEVD;

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, NEVD and BA hereby agree to amend the Agreement as follows:

1. Subject to the provisions of paragraph 2 below, BA agrees to provide Unbundled Dark Fiber to NEVD as a Network Element pursuant to the same terms and conditions under which BA makes Unbundled Dark Fiber available to other Competitive Local Exchange Carriers ("CLECs") in Massachusetts. Those terms and conditions are contained in BA's Unbundled Dark Fiber Service Description, as modified from time to time in BA's reasonable discretion subject to the jurisdiction of the Massachusetts Department of Telecommunications and Energy ("DTE"). A copy of the current Unbundled Dark Fiber Service Description is attached hereto as Exhibit DF.
2. BA agrees to provide Unbundled Dark Fiber to NEVD as a Network Element hereunder only to the extent that, and only for as long as, BA is required to do so pursuant to the Phase 3 Order of the DTE in the Consolidated Arbitrations (D.P.U. 96-73/74, 96-75, 96-80/81, 96-83 and 96-94) ("Order"), or such other explicit legal requirement as may subsequently be imposed. BA expressly reserves the right to appeal or otherwise seek to overturn the Order by any lawful means. At such time as the Order ceases to be binding on BA, BA may terminate its provision of Unbundled Dark Fiber hereunder on written notice to NEVD, subject to a reasonable transition period or such alternative arrangements as the parties may at that time negotiate.

3. The initial prices applicable to the provision of Unbundled Dark Fiber hereunder shall be those filed by BA with the DTE for approval, as indicated in the attached pricing schedule. Upon DTE approval of permanent prices for Unbundled Dark Fiber, the approved prices shall apply.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed as of this 4th day of January, 1999.

NEW ENGLAND VOICE AND DATA, LLC

BELL ATLANTIC - MASSACHUSETTS

By: Robert Shanahan

Printed: Robert Shanahan

Title: President

By: Jeffrey A. Masoner

Printed: Jeffrey A. Masoner

Title: Vice-President - Interconnection
Services Policy & Planning

UNBUNDLED DARK FIBER SERVICE DESCRIPTION

1.0 As a result of the Massachusetts Department of Telecommunications and Energy's Phase 3 Order in the Consolidated Arbitrations (D.P.U. 96-73/74, 96-75, 96-80/81, 96-83 and 96-94), Bell Atlantic-Massachusetts (BA-MA) is required to offer dark fiber as an unbundled network element (UNE) to Competitive Local Exchange Carriers (CLECs) in Massachusetts. Unbundled Dark Fiber will be offered in Massachusetts to CLECs in the manner described herein in order to comply with the Phase 3 Order.

1.1 Unbundled Dark Fiber is defined as a continuous fiber optic strand within an existing, in-place fiber optic cable sheath owned by BA-MA that a CLEC may access via its collocation arrangement. Establishment of applicable fiber optic transmission equipment or intermediate repeaters needed to power the Unbundled Dark Fiber in order to transmit information is the responsibility of the CLEC. A strand is not considered continuous if splicing is required to provide fiber continuity between locations. If a fiber strand can be made continuous by joining fibers at existing splice points within the same sheath, BA-MA will perform such splicing at the CLEC's request on a time-and-materials basis.

1.2 Unbundled Dark Fiber will be offered in Massachusetts to CLECs, subject to availability, solely for the purpose of their using the fiber as a transmission medium in the provision of telecommunications services. Unbundled Dark Fiber, where available, may be accessed from the CLEC's collocation arrangement at existing BA-MA hard termination points (e.g., fiber distribution frames, industry standard mechanical fiber connectors) or, as directed in the Phase 3 Order, at existing splice points. Unbundled Dark Fiber will be offered in a minimum quantity of two (2) fibers, with additional increments of two (2) fibers between the same two (2) locations.

1.3 BA-MA will make available for lease existing, in-place, spare dark fiber as Unbundled Dark Fiber to CLECs under contractual agreements and on a "first come, first served" basis. Reservations are not accepted for Unbundled Dark Fiber. BA-MA will not construct new or additional facilities to satisfy a CLEC's request for Unbundled Dark Fiber.

1.4 The Bell Atlantic Telecom Industry Services Operations Center (TISOC) will be the single point of contact for all Unbundled Dark Fiber requests. The CLEC must submit a written request designating the two locations between which Unbundled Dark Fiber is desired and the quantity of Unbundled Dark Fiber pairs requested. Each request must specify two (2) locations only; additional locations will require additional requests. BA-MA provides Unbundled Dark Fiber, where available, between the following locations: 1) CLEC's collocation arrangements, 2) CLEC's collocation arrangement and end users' premises, and 3) CLEC's collocation arrangement and an existing BA-MA splice point.

Upon receipt of the CLEC's written request, BA-MA will initiate a review of its cable records to determine whether spare dark fiber may be available for lease as Unbundled Dark Fiber between the locations and in the quantities specified in the CLEC's request, subject to field verification as

outlined in 1.8 below. BA-MA will respond within fifteen (15) business days from receipt of the CLEC's request, indicating whether Unbundled Dark Fiber may be available based on the records search, except that for voluminous requests or large, complex projects, BA-MA reserves the right to negotiate a different interval. BA-MA will also provide an estimate of the applicable rates and charges for Unbundled Dark Fiber when the records indicate spare dark fiber may be available.

1.5 In order to maintain the integrity and reliability of the BA-MA network, BA-MA will reserve a reasonable quantity of fibers in any cable, depending upon the total number of fibers in the cable, to be designated as maintenance spares in order to effect emergency repairs or network rearrangements. These maintenance spares will not be available for lease as Unbundled Dark Fiber.

1.6 If the CLEC requests Unbundled Dark Fiber pairs that BA-MA has allocated for another customer (e.g., they have been installed or allocated to serve a particular customer in the near future), or for growth or survivability in a particular part of its network, BA-MA shall not be required to lease such dark fiber pairs as Unbundled Dark Fiber.

1.7 In the event Unbundled Dark Fiber is not available because of the reasons cited in the above two paragraphs (i.e., it is being reserved for maintenance, or allocated for a specific customer or for growth), BA-MA will notify the requesting CLEC as soon as practicable. The CLEC may request documentation supporting BA-MA's determination that existing, spare fiber is not available for lease as Unbundled Dark Fiber. BA-MA will provide such documentation which may include, at BA-MA's sole option, copies of its records or information extracted from its records, omitting all proprietary or confidential information. Such documentation will be provided within thirty (30) business days of the CLEC's request for the documentation, except that for voluminous requests or large, complex projects, BA-MA reserves the right to negotiate a different interval. The CLEC will be billed a non-recurring charge for cable documentation per request to reimburse BA-MA for the costs incurred in providing the CLEC with the documentation described in this provision.

1.8 BA-MA makes no representation or warranty regarding the accuracy or completeness of its cable records. At the CLEC's option, per the terms of individually negotiated contracts, BA-MA will initiate a field survey to verify the availability of dark fiber pairs for lease as Unbundled Dark Fiber, and that such fiber pairs are not defective or have not been used by field personnel for prior emergency restoration activity. In addition, as part of the field survey, the fiber pairs requested by the CLEC will be tested by placing a light source on the individual fibers and measuring the end-to-end loss utilizing industry standard fiber optic test equipment. The test results will be documented and provided to the CLEC. The applicable rates and charges estimated in 1.4 will also be confirmed at the conclusion of the field survey, and the CLEC will be informed of any modifications to the preliminary rate quote. When a field survey is performed, the CLEC will be billed a non-recurring charge on a time-and-materials basis, regardless of the outcome of the survey. The interval for the field survey will be negotiated based upon the number of locations and quantity of fiber pairs requested. Should the CLEC wish to proceed in ordering Unbundled Dark Fiber based on the results of the field survey, the CLEC

must place an order with the BA-MA TISOC by the close of business on the next business day, after which the fiber will become available to satisfy other requests.

1.9 Should the CLEC decline the field survey described in 1.8 above and place an order for Unbundled Dark Fiber based solely on the information contained in BA-MA's cable records, the CLEC assumes all risks of relying on such records including, but not limited to, revised rates and/or order cancellation charges if it is subsequently determined during the implementation process that Unbundled Dark Fiber is not available.

1.10 BA-MA's sole obligation is to provide Unbundled Dark Fiber, where available, that conformed to BA-MA standard transmission characteristics at the time the fiber was installed. It is the CLEC's responsibility to determine that the transmission characteristics of the Unbundled Dark Fiber provided by BA-MA will accommodate the CLEC's transmission requirements and loss budget. BA-MA will not re-terminate or re-splice fibers in order to improve the transmission characteristics of Unbundled Dark Fiber. Time-and-materials charges will apply if the CLEC requests BA-MA to re-test the fibers subsequent to the field survey described in 1.8 above. In cases where a field survey is declined by the CLEC, as described in 1.9 above, initial or subsequent testing of the fiber to determine actual transmission requirements will be performed at the CLEC's request on a time-and-materials basis. If the CLEC subsequently determines the Unbundled Dark Fiber provided by BA-MA is not suitable, the CLEC must submit a request to disconnect the Unbundled Dark Fiber.

1.11 The transmission characteristics of the Unbundled Dark Fiber cannot be guaranteed to remain constant over time. Cable restoration or network rearrangements that require additional field splices may result in additional loss being introduced. The CLEC assumes all risks associated with the unforeseen introduction of future splices.

1.12 When the CLEC places an order for Unbundled Dark Fiber, the CLEC will be billed a non-recurring service order charge for the initial pair of fibers between the two (2) locations specified in the CLEC's request. An incremental service order charge will apply for each additional pair of fibers between the same two (2) locations when ordered at the same time on a single request. In addition to the service order charge, appropriate time-and-materials charges will be billed to the CLEC to recover the work efforts involved with the initial review of BA-MA's records.

The CLEC will also be billed a monthly rate that consists of a fixed monthly charge per fiber pair, per serving wire center, and a monthly rate per fiber pair, per mile. The mileage used to determine the monthly rate for Unbundled Dark Fiber is based on airline mileage utilizing the Vertical and Horizontal (V&H) coordinate method between the locations to which the facility is provisioned. When the calculation results in a fraction of a mile, the mileage will be rounded up to the next whole mile before applying the rates. In all cases, a minimum of one mile shall apply.

1.13 In a BA-MA central office, BA-MA will provide Unbundled Dark Fiber hard termination at a fiber distribution frame (FDF). BA-MA will provide appropriate cross-connections at such FDFs to the collocation node. (Appropriate recurring monthly charges will apply: Service

Access Charge (SAC) with physical collocation and Interconnection Access Charge (IAC) with virtual collocation.) In addition, when BA-MA provides intermediate cross-connection(s) at a FDF in intermediate BA-MA central office(s) to accommodate a CLEC's request, an Unbundled Dark Fiber Intermediate Cross-Connection recurring charge will apply.

1.14 BA-MA will not introduce additional splice points to accommodate a CLEC's request. All work required to be performed at an existing splice location will be performed by BA-MA personnel. In the case of interconnection at an existing splice point, BA-MA, using current BA-MA approved splicing methods, will connect to a fiber optic cable provided, installed and maintained by the CLEC. All rights-of-ways, conduit, duct, and pole space for the CLEC-provided cable are to be secured by the CLEC at the CLEC's expense. Any additional BA-MA costs incurred to gain access to an existing splice point and to perform a splice or related work will be billed to the CLEC on a time-and-materials basis. To the extent any governmental or private property permit, easement, or other authorization or approval is required for access to Unbundled Dark Fiber, such as to open manhole covers, the CLEC is responsible for obtaining such permit, easement, or authorization.

1.15 In its Phase 3 Order, the Department recognized that when a fiber cable is spliced, the "downstream" portion of the fiber may become unusable or stranded. In cases where interconnection at an existing splice location renders other portions of the fiber unusable or stranded, a recurring charge will apply per fiber pair, per mile, based on airline mileage utilizing the V&H coordinate method. When the calculation results in a fraction of a mile, the mileage will be rounded up to the next whole mile before applying the rates. In all cases, a minimum of one mile shall apply. Notwithstanding this provision, if BA-MA believes that a request by a CLEC for lease of Unbundled Dark Fiber would strand an unreasonable amount of fiber capacity, BA-MA is allowed to petition the Department for relief from its obligation to provide Unbundled Dark Fiber. BA-MA also reserves the right to seek relief from its obligation if a request for Unbundled Dark Fiber would result in service disruption or degradation to other customers or carriers.

1.16 In the event Unbundled Dark Fiber is leased to a CLEC, and the Unbundled Dark Fiber is no longer being used by the CLEC in the provision of telecommunications services, the Unbundled Dark Fiber will be returned to BA-MA by the CLEC within 60 days.

1.17 In leasing Unbundled Dark Fiber, the CLEC accepts the environmental risks inherent in outside plant construction. In the event BA-MA must perform emergency cable restoration to its own facilities, all efforts will be made to restore the CLEC's leased Unbundled Dark Fiber pairs in the same manner as other fibers in the same cable sheath using BA-MA standard restoration procedures. Upon notification by BA-MA, the CLEC must also agree to cooperate with BA-MA for normal cable maintenance activity (e.g., cable rearrangements, etc.).

1.18 BA-MA will commence billing for Unbundled Dark Fiber (i.e., applicable non-recurring and recurring rates as described in Sections 1.1, 1.8, 1.10, 1.12, 1.13, 1.14 and 1.15) upon completion of the service order on the requested due date. The CLEC may request a change of service date for the Unbundled Dark Fiber request, but the new service date may not exceed the

original service date by more than 30 calendar days. BA-MA accordingly delays the start of service and the CLEC is charged a Service Date Change charge.

If the CLEC's requested service date is more than 30 calendar days after the original service date, or if the CLEC is unable to accept the Unbundled Dark Fiber within 30 calendar days of the original service date, the CLEC's order for the Unbundled Dark Fiber will be canceled by the TISOC representative on the 31st day with the appropriate Cancellation Charges as defined in Section 1.19. In addition, the pairs requested on the canceled order(s) will not be reserved for the CLEC and will be returned to available inventory.

1.19 Cancellation charges billed to the CLEC include appropriate service order charges in addition to any time-and-materials charges for installation work performed and other expenses incurred on behalf of the CLEC's request(s) up to and including the day the cancellation is received or the order is canceled by BA-MA per the terms of Section 1.18.

TIME & MATERIALS BILLING

(When Applicable)

WORK GROUP	USOC	WORK FUNCTION			
		Field Survey (Par. 1.8)	Testing (Par. 1.10)	Splice (Par. 1.1 & 1.14)	Records Review (Par. 1.12)
NTE ¹ Planning	TM1DA	X	X	X	X
NTE ¹ Design	TM1DB	X	X	X	X
NTE ¹ Technician	TM1DC	X	X	X	X
C.O. Frame Technician	TM1DD	X	X		

Exhibit 1

¹ NTE - Network Transport Engineering (Used generically to represent all outside plant work groups involved in the planning, design, and implementation of fiber optic cable.)

Massachusetts - Dark Fiber Price Schedule

Line

NRC

1	Service Order:	Initial Pair - Per 'A' - 'Z' Point	\$ 23.63
2		Each Add'l Pair - Same 'A' - 'Z' Point	\$ 21.48
3	Cable Documentation:	Per Request	\$ 30.26

Monthly Recurring

4	Fixed Cost per Serving Wire Center:	Per Pair	\$ 11.97
5	Fiber per Mile:	Per Pair	\$ 65.38
6	Intermediate C.O. Cross-Connection:	Per Pair	\$ 19.70
7	Unusable Fiber Strands per Mile:	Per Pair	\$ 45.92